

## **Excavation Summary Report**

Pacific Gas and Electric Company  
Natural Gas Transmission Pipeline Excavation  
San Bruno, California  
Site: 1121 Glenview Dr., San Bruno, CA  
June 25-29, July 2, 2012

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## Scope and Sensitivity of Residents

On June 25, 2012 PG&E began excavating a section of asphalt at 1121 Glenview Drive, as part of the project involving the abandonment of the 1948 and 1956 Natural Gas Transmission Pipelines. This is the residential neighborhood that was directly involved in the September 2010 gas line explosion. Observation of the work being done by PG&E was done with specific attention paid to the safety and sensitivity of the residents.

## Purpose of PG&E Excavations

The main purpose of the project is to obtain samples of pipe and liquid of the 1948 and 1956 PG&E Natural Gas Transmission Pipelines. This will be done by using all measures of standard procedures, which include performing analytical inspections. The inspections include the testing of all fluid, pipe and vapors that are currently present. All testing and lab results will be completed before pumping slurry into the pipelines rendering them as "abandoned."

The following report will detail the daily procedures conducted by PG&E, and third party subcontractors; ARB Inc., PSC, Allisto Engineering Group, and PEI during this process and recommendations.

### 1. Factual Information

#### 1.1 Daily Activities: Points of Activity Log

##### Monday 6-25-2012:

- Met with Klara A. Fabry, P.E. Public Service Director of the city of San Bruno California at 7:30 a.m. discussed history and concerns regarding the sensitivity of the residents at the excavation site.
- Arrived at the designated meeting site located at the corner of Glenview Drive and San Bruno Ave.
- Signed in
- Traffic control was implemented at 9:00 A.M.



- Saw cut asphalt at 1121 Glenview Drive
- Excavation commenced at 10:00 a.m.



- Observed employees smoking on site around excavation, advised PG&E that they needed to move all smoking activity at least 50 feet from excavation site.
- Exposed 2 inch save-a-valve at 2:35 P.M.



- PSE set up containment tent and vapor filtration system from 3:00 – 4:00PM, Allisto started air sampling inside Containment Tent





- ARB contractors left for material run which caused a delay in the schedule; ARB returned after 5:00
- Connections to save-a-valve were completed and PEI air sampling of the 1948 and 1956 pipeline for mercury vapor began at 5:00 P.M.
- Trench-plates were installed over excavation site.



- Traffic control was removed and all personnel were off site at 6:30 P.M.

#### **Tuesday 6-26-2012**

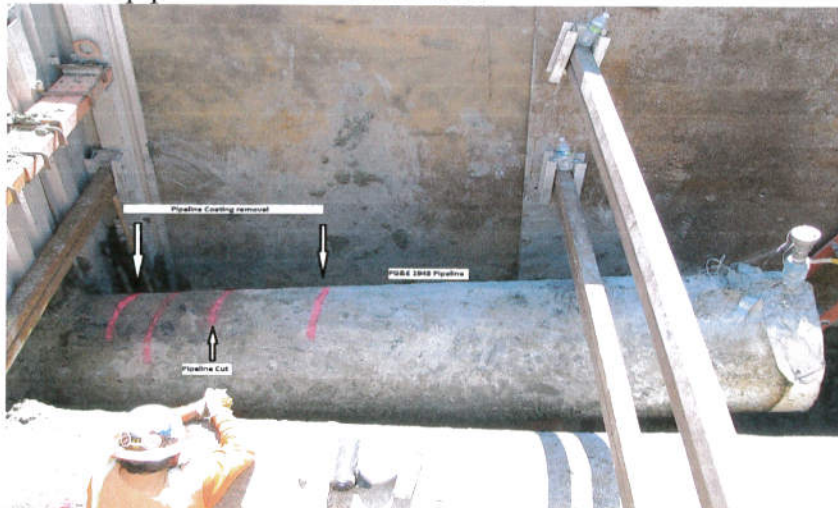
- 7:30 A.M. Safety Meeting was conducted on site at Lay Down Yard located on Glenview Drive north of San Bruno Avenue.
- The issue pertaining to smoking on the excavation site was discussed with a distance of 125 feet from excavation site being assigned as the designated area for smoking. Smoking any closer to this was prohibited due to safety factors. Also discussed was the need to mitigate the amount of personnel and activity around private property as well as the need be on sidewalks and streets.
- Traffic control was implemented.
- Trench plates were removed from the excavation site.
- PSE assembled the containment tent and vapor filtration system over the excavation site and Allisto started air sampling inside Containment Tent.
- During PEI's daily sampling for mercury vapors there was an indication of small amounts of mercury PEI indicated that the levels below the permissible exposure limit .
- All preparation was completed by 8:15 A.M.
- Allisto began the process of atmospheric sampling of 1956 and 1948 pipelines and completed at 1:00 P.M. air samples were sent to lab for analysis with 24-hour turn around.



- ARB continued excavation of pipelines
- Trench-plates were installed over excavation site.
- Traffic control was removed and all personnel were off site 6:00 P.M.

### Wednesday 6-27-2012

- 7:30 A.M. Safety Meeting was conducted on site at Lay Down Yard.
- The issue pertaining to tripping hazards around the excavation site due to equipment and materials was addressed.
- It was further addressed that personnel need to be mindful to the sensitivity of the residents as the work is being conducted around and on private property.
- Traffic control was implemented.
- Trench plates were removed from the excavation site 8:30 A.M.
- Determination was made to extend the excavation site 2 feet south in order to remove 8ft section of 1948 pipe for testing.
- Resumed excavation 9:00 A.M. – 4:00 P.M.
- ARB measured and identified cut-lines for the removal of a section of pipe from the 1948 pipeline as well as the 1956.



(Golden State Utility was called out to attempt to locate the end of the 1948 pipeline)

- Removed 2feet of coating of 1948 and 1956 pipeline.





- There was no visual indication of corrosion.
- PSE assembled the containment tent and vapor filtration system over the excavation site and Allisto started air sampling inside Containment Tent.
- Allisto received lab results from previous days sampling which indicated the presence of VOC (volatile organic compound). As a result it was required of all personnel entering the excavation hole to wear cartridge respirators for VOC protection.
- Due to the close proximity of the 1946 and 1958 pipelines it was necessary to cut the 1956 line with an air chisel. The cut was completed and the removed pipe was left in the excavation hole 7:15 P.M.
- A new end cap was installed and secured with duck tape on the end of the 1956 pipeline.
- PSE disassembled the containment tent and vapor filtration system.
- Trench-plates were installed over excavation site.
- Traffic control was removed and all personnel were off site by 8:15 P.M.

#### **Thursday 6-28-2012**

- 7:30 A.M. a Safety Meeting was conducted on site at Lay Down Yard
- Safety Issues were addressed regarding the handling of the 30" 1956 section of pipe, which had been left in the excavation hole the previous evening. Personnel had placed themselves between both pieces of the 1948 and 1956 pipe while it was being lowered which could have resulted in injury.
- Traffic control 8:15 A.M.
- Trench plates were removed at 8:30 A.M
- PSE set up containment tent and vapor filtration system over excavation site.
- The cold cut of 8feet of 1948 pipeline with 30" cold cutters was completed at 10:25 A.M.
- The 1948 pipeline was sealed with an end cap.
- PSE removed containment tent and vapor filtration system intact at 11:00 A.M.
- The 1948 and 1956 sections of pipeline were removed at 11:30 a.m. and prepped for transport to Modesto, California, where coupons were to be cut and shipped to Texas for further analysis.



- Subtronics Corp. prepared for the video camera run on the 1948 pipeline 12:00 P.M.
- PSE set up containment tent and vapor filtration system over the excavation site and Allisto started air sampling inside Containment Tent.
- Subtronics Corp. inserted a video camera inside the 1948 pipeline for the purpose of locating the ending point of the 1948 pipeline and for gathering a sample of fluid contained within the 1948 section of pipeline.
- First video camera run was conducted at 1:30 P.M.



- Subtronics Corp. would not run large video camera down 45-degree turn and large video camera was retrieved from 1948 pipeline.
- Second run was attempted with a smaller video camera down the 45-degree pipe and turned horizontal across the creek crossing and encountered sludge in the bottom of the pipeline, the video camera was retrieved, as it could not go through sludge substance.





- Golden State Utility was called to site a second time for the purpose of locating the end of the 1948 pipeline. Process ran 3:00 – 4:15 P.M.
- Due to the depth of the pipeline there was a vast degree of uncertainty where the pipeline ends; an approximation of location was made. Golden State Utility recommended using a coil- tubing unit to locate the end of the pipeline.
- PSE removed containment tent and vapor filtration system.
- Installed trench-plates over excavation hole.
- Traffic control signs were removed.
- Prior to daily departure City of San Bruno discussed the possibility of moving the construction site south from the current site with PG&E Construction, in order to minimize the continued impact on the residents, as it was clear this was going to be a longer project than first projected.
- Traffic control was removed and all personnel were off site by 5:15 P.M.

#### **Friday 6-29-2012**

- 7:30 A.M. Safety Meeting was conducted on site at Lay Down Yard.
- Worksite preparation and implementation of Traffic control 8:15 A.M.
- Trench plates were removed at 8:30 A.M.
- Golden State Utility moved in a Coil Tubing truck in order to locate end of 1948 pipeline 8:30 A.M.



- PSE set up containment tent and vapor filtration system over excavation site. Allisto started air sampling inside Containment Tent.
- Golden State began insertion of coil tubing, coil tubing became stuck in pipeline 11:30 A.M., attempted to retrieve coil tubing using coil tubing truck, was unsuccessful.
- After conferring with Golden State Utility engineers, it was determined that tubing would need to be cut. Tubing was cut using a sling and attached to a backhoe to facilitate removal. Tubing was successfully removed at 4:00 P.M.

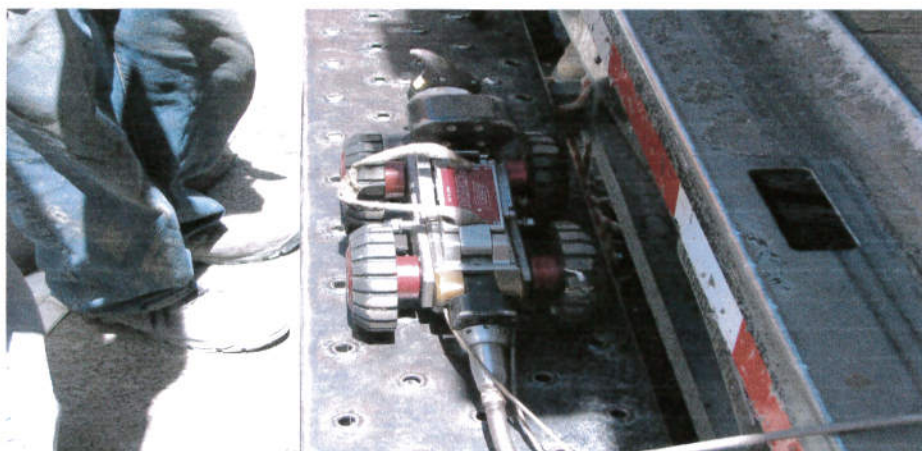


- Tubing was cut up for disposal from 4:00-4:30 P.M.
- PSE removed containment tent and vapor filtration system.
- Trench plates were installed over excavation hole.
- Traffic control signs were removed.
- Traffic control was removed and all personnel were off site by 5:00 P.M.
- Prior to daily departure it was discussed by PG&E Construction, Customer Service, and City of San Bruno that due to residents having a party on Saturday afternoon there would be no work conducted on Saturday June 30. It was also decided that another attempt would be made on Monday July 2 for another video camera run through the 1948 pipeline.



**Monday 7-2-2012**

- 7:30 A.M. Safety Meeting was conducted on site at Lay Down Yard.
- Worksite preparation and the implementation of traffic control took place at 8:15 a.m.
- The trench plates were removed at 8:30 a.m.
- Subtronics Corp. set up for video camera run on 1948 pipeline.
- PSE set up containment tent and vapor filtration system over excavation site and Allisto started air sampling inside Containment Tent.



- First video camera run was made and was successful at maneuvering video camera thru sludge and encountered liquid downstream of sludge in 1948 pipeline.
- Retrieved video camera from pipeline and made four video camera runs to obtain a sample of liquid. Subtronics Corp. was successful in obtaining a sufficient amount of liquid for an analysis.
- Video camera was not successful in locating end of pipeline and it was retrieved
- Golden State Utility was called out again to locate and mark the end of pipeline.





- End caps were placed on 1948 pipeline.



- Installed trench-plates over excavation site.
- Prior to departure City of San Bruno Inspector recommended to PG&E Construction for a second time that the excavation site be moved 280 feet south adjacent to a vacant lot south of Claremont Dr. in order to be more sensitive to residents.



- Removed traffic control signs
- Off site 5:30 P.M.



## 1.2 Recommendation:

It is recommended that the worksite be moved from the front of the home at 1121 Glenview Drive and moved 280 feet south adjacent to a vacant lot where the work objective can be successfully accomplished causing the least disruption to a recovering neighborhood. PG&E chose the worksite at 1121 Glenview Drive because of its accessibility to the 1948 and 1956 pipeline sections that required testing. Now that this work has been completed it is recommended that any further work that is being performed should be done at the new proposed site. This is due to the fact that the current site is disruptive to the neighborhood and the excavation site extends 17 inches into the sidewalk and 4 feet into the private driveway of the residence. The homeowner was seen parking a block away and walking to their residence during the work activity.

It is also recommended that both pipes be capped off and risers installed on each pipeline for abandonment slurry, site should be backfilled and the installation of 2 man-ways should be installed in order to eliminate any further construction in the immediate residential area.

